

Claims

Claim 1. (Original) A streaming media quality analyzer system comprising:

- means for transmitting packetized streaming media from a source over a network to a remote site;
- means for performing an analysis of the packetized streaming media received at the remote site;
- means for transmitting results of the analysis over the network to a measurement site;
- means for reconstructing at the measurement site using the results of the analysis the packetized streaming media received at the remote site; and
- means for analyzing the reconstructed packetized streaming media at the measurement site to determine the quality of the packetized streaming media received at the remote site.

Claim 2. (Original) The streaming media quality analyzer system as recited in claim 1 wherein the packetized streaming media transmitting means comprises means for packetizing the streaming media into user datagram protocol packets as the packetized streaming media.

Claim 3. (Original) The streaming media quality analyzer system as recited in claim 2 wherein the results transmitting means comprises means for packetizing the results into transmission control protocol packets.

Claim 4. (Original) The streaming media quality analyzer system as recited in claim 3 wherein the analyzing means comprises:

first means for decoding the reconstructed packetized streaming media to recover an impaired streaming media; and

means for determining from the impaired streaming media the quality of the packetized streaming media received at the remote site.

Claim 5. (Original) The streaming media quality analyzer system as recited in claim 4 wherein the determining means comprises a media quality analyzer having a reference input coupled to receive the streaming media from the source and a test input coupled to receive the impaired streaming media and providing as an output a measure of the quality of the packetized streaming media received at the remote site.

Claim 6. (Original) The streaming media quality analyzer system as recited in claim 4 wherein the determining means comprises:

second means for decoding the packetized streaming media from the source to recover the streaming media; and

a media quality analyzer having a reference input coupled to receive the streaming media from the second decoding means and a test input coupled to receive the impaired streaming media and providing as an output a measure of the quality of the packetized streaming media received at the remote site.

Claim 7. (Original) The streaming media quality analyzer system as recited in claim 3 wherein the analyzing means comprises:

means for recovering the packetized streaming media from the network as

originally transmitted by the source, the recovered packetized streaming media being input as the packetized streaming media to the reconstructing means;

means for decoding the recovered packetized streaming media and the reconstructed packetized streaming media to produce a reference streaming media and an impaired streaming media respectively; and

means for determining from the reference streaming media and the impaired streaming media a measure of the quality of the packetized streaming media received at the remote site.

Claim 8. (Original) The streaming media quality analyzer system as recited in claim 2 wherein the results transmitting means comprises means for packetizing the results into realtime transport control protocol packets where realtime transport protocol is used as an application layer over user datagram protocol packets.

Claim 9. (Original) A method of quality analyzing at a measurement site a streaming media that is packetized and transmitted over a network from a source to a remote site comprising the steps of:

performing an analysis of the packetized streaming media received at the remote site;

transmitting results of the analysis over the network to the measurement;

reconstructing at the measurement site from the packetized streaming media that was transmitted and the results of the analysis the packetized streaming media received at the remote site; and

analyzing at the measurement site the reconstructed packetized streaming media to determine the quality of the packetized streaming media received at the remote site.

Claim 10. (Original) A streaming media quality analyzer system for a streaming media transmission system of the type that transmits streaming media from a source over a network packetized streaming media to a remote site for display comprising:

means at the remote site for performing an analysis of the packetized streaming media;

means for transmitting results of the analysis over the network to a measurement site;

means at the measurement site for reconstructing from the packetized streaming media from the source and the results from the remote site the packetized streaming media as received at the remote site; and

means for analyzing the reconstructed packetized streaming media at the measurement site to determine the quality of the packetized streaming media received at the remote site.

Claim 11. (Currently Amended) A streaming media quality analyzer system for a streaming media system having streaming media transmitted from a source as packetized streaming media over a network to a remote site for use comprising:

a reference server located at the remote site having as an input the packetized streaming media as received at the remote site and having as an output an analysis of the packetized streaming media;

means for transmitting the analysis over the network to a measurement site;

a receiver emulator having as inputs the packetized streaming media and the ~~statistical~~ analysis and having as an output a reconstructed packetized streaming media that resembles the packetized streaming media received at the remote site; and

means for analyzing the reconstructed packetized streaming media to determine the quality of the packetized streaming media received at the remote site.

Claim 12. (Original) The streaming media quality analyzer system as recited in claim 11 wherein the analyzing means comprises:

means for decoding the reconstructed packetized streaming media to produce an impaired streaming media; and

a media quality analyzer having the impaired streaming media as an input which determines the quality of the packetized streaming media received at the remote site.

Claim 13. (Currently Amended) The streaming media quality analyzer as recited in claim 12 wherein the media quality analyzer has ~~an~~ a reference input to which the streaming media from the source is applied and a test input to which the impaired streaming media is applied, and has an output providing a measure of the quality of the packetized streaming media received at the remote site.

Claim 14. (Currently Amended) The streaming media quality analyzer as recited in claim 13 wherein the analyzing means further comprises a second means for decoding original data packets representing the streaming media in the packetized streaming media ~~prior to transmission over the network~~ to recover the streaming media from the source for input to the media quality analyzer.

Claim 15. (Original) The streaming media quality analyzer as recited in claim 14 wherein the analyzing means further comprises means at the measurement site for

recovering the packetized streaming media from the network resembling the packetized streaming media prior to transmission over the network, the recovered packetized streaming media being input to the second decoding means to recover the streaming media from the source.